

What is claimed is:

1        1. A display element comprising:  
2        a glass substrate with an top surface on which a  
3        luminescent body is formed;  
4        a glass cap with a bottom surface on which the rim is  
5        bonded to the rim of the top surface of the glass substrate  
6        to create an airtight space; and  
7        a sealing layer formed on the bonding region between the  
8        glass substrate and the glass cap, wherein the sealing layer  
9        is frit.

1        2. The display element according to claim 1, wherein the  
2        sealing layer comprises spacers embedded in frit.

1        3. The display element according to claim 1, further  
2        comprising a rib structure formed on the bottom surface of  
3        the glass cap, surrounded by the sealing layer and surrounding  
4        the luminescent body.

1        4. The display element according to claim 3, wherein the  
2        rib structure is frit.

1        5. The display element according to claim 3, wherein the  
2        rib structure is of ceramic materials.

1        6. The display element according to claim 1, further  
2        comprising a concavity on the bottom surface of the glass cap  
3        and positioned corresponding to the luminescent body.

1        7. The display element according to claim 1, wherein the  
2 display element is used in an organic light emitting diode  
3 (OLED).

1        8. The display element according to claim 1, wherein the  
2 display element is used in a plastic light emitting diode  
3 (PLED).

1        9. The display element according to claim 1, wherein the  
2 luminescent body is at least laminated with an anode layer,  
3 an organic luminescent layer and a cathode layer.

1        ~~10.~~ A method of encapsulating a display element,  
2 comprising steps of:

3        providing a display element, which has a luminescent body  
4 formed on a glass substrate, a glass cap with the rim bonded  
5 to the rim of the glass substrate, and a sealing layer of frit  
6 formed on the bonding region between the glass substrate and  
7 the glass cap;

8        providing a pedestal on which the display element is  
9 placed;

10       providing a pressing plate disposed on the display  
11 element;

12       providing a high-power beam which penetrates the glass cap  
13 to focus on the sealing layer so as to sinter frit; and

14       applying pressure on the pedestal and the pressing plate.

1        11. The method of encapsulating the display element  
2 according to claim 10, wherein the pedestal and the pressing  
3 plate are metal materials with good thermal conductivity.

1        12. The method of encapsulating the display element  
2 according to claim 10, wherein the high-power beam is a laser  
3 beam.

1        13. The method of encapsulating the display element  
2 according to claim 12, wherein the laser beam has a wavelength  
3 of more than 550nm.

1        14. The method of encapsulating the display element  
2 according to claim 10, wherein the high-power beam is an  
3 infrared ray.

1        15. The method of encapsulating the display element  
2 according to claim 14, wherein the infrared ray has a  
3 wavelength of more than 800nm.

1        16. The method of encapsulating the display element  
2 according to claim 10, wherein the sealing layer comprises  
3 spacers embedded in frit.

1        17. The method of encapsulating the display element  
2 according to claim 10, wherein the display element comprises  
3 a rib structure formed on the bottom surface of the glass cap,  
4 surrounded by the sealing layer and surrounding the  
5 luminescent body.

1        18. The method of encapsulating the display element  
2 according to claim 17, wherein the rib structure is frit.

1        19. The method of encapsulating the display element

2 according to claim 17, wherein the rib structure is of ceramic  
3 materials.

1 20. The method of encapsulating the display element  
2 according to claim 10, the display element comprises a  
3 concavity formed on the bottom surface of the glass cap and  
4 positioned corresponding to the luminescent body.

1 21. The method of encapsulating the display element  
2 according to claim 10, wherein the display element is used  
3 in an organic light emitting diode (OLED).

1 22. The method of encapsulating the display element  
2 according to claim 10, wherein the display element is used  
3 in a plastic light emitting diode (PLED).

1 23. The method of encapsulating the display element  
2 according to claim 10, wherein the luminescent body is at  
3 least laminated with an anode layer, an organic luminescent  
4 layer and a cathode layer.